

Linear Actuator System for the NASA Docking System

The Linear Actuator System (LAS) is a major sub-system within the NASA Docking System (NDS). The NDS Block 1 will be used on the Boeing Crew Space Transportation (CST-100) system to achieve docking with the International Space Station. Critical functions in the Soft Capture aspect of docking are performed by the LAS, which implements the Soft Impact Mating and Attenuation Concept (SIMAC). This paper describes the general function of the LAS, the system's key requirements and technical challenges, and the development and qualification approach for the system.